

## ABSTRACT

A blood flow visualizing diagnostic apparatus characterized by having an ultrasonic measurement unit 120 which emits an ultrasonic beam toward a blood vessel inside a human body to receive the reflected ultrasonic signal, an analysis processing unit 220 which obtains a blood vessel shape and a blood flow velocity in the blood vessel by the received signal, a simulation unit 244 which sets computational lattices on the basis of the blood vessel shape obtained by the analysis processing unit 220 to simulate the blood flow velocity and a pressure distribution, a feedback unit 246 which computes an error between the blood flow velocity obtained by the analysis processing unit and the blood flow velocity obtained by the simulation unit 244 to feed back the error to the simulation unit 244, and display units 260 and 140 which display the blood flow velocity and the pressure distribution output from the simulation unit after the feedback.